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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,959	01/29/2002	Alistair Neil Coles	1509-269	3543

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EXAMINER

SELLERS, DANIEL R

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/057,959	COLES ET AL.	
	Examiner	Art Unit	
	Daniel R. Sellers	2644	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 5, 7-13, 16, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Slezak and McPherson et al., U.S. Pat. Pub. 2001/0046199 (hereinafter McPherson).

3. Regarding claim 1, see Slezak column 7, line 62 – column 8, line 17. Slezak teaches an audio source, a terminal, audio transducers, and audio components comprising audible sounds or tracks and positional data. Slezak teaches that the playing terminal generates a set of spatialized processed audio data (Col. 4, line 39 – Col. 5, line 12) and further teaches that distributed computing can split tasks across local and remote computers (Col. 2, lines 51-57). Slezak however does not teach two different bit-rates for transmission of the audio components. McPherson teaches a medium comprising audio data in a multi-channel arrangement, wherein the additional channel information can be recorded at lower bit-rates and resolutions than the stereo arrangement (Para. 0008 and 0022). McPherson also teaches a two channel derivation from the multi-channel arrangement (Para. 0009, 0010, 0032, and 0033). It would have been obvious for one of ordinary skill in the art to combine the teachings of Slezak and McPherson for the purpose of utilizing bandwidth efficiently.

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4. Regarding claim 2, the further limitation of claim 1, see Slezak

*... further comprising a user control device coupled to the playing terminal and arranged to enable user-selection of one the audible sounds or tracks, corresponding to one of the audio components outputted from the audio transducer arrangement, as a focus sound or track. (Col. 10, lines 1-15 and Fig. 10, item 294)*

Slezak teaches the use of a mouse and the ability to select an audible sound as a focus sound.

5. Regarding claim 5, the further limitation of claim 2, see the preceding argument with respect to claim 2. A mouse is a user control device that comprises at least one button.

6. Regarding claim 7, the further limitation of claim 1, see Slezak

*... wherein the data link is a wireless data link (Col. 3, lines 53-55).*

Slezak teaches a wireless data link.

7. Regarding claim 8, the further limitation of claim 7, see Slezak

*... wherein the wireless data link is established over a mobile telephone connection. (Col. 4, lines 1-7)*

Slezak teaches the use of a wireless network and the use of modems to connect to a network, such as the Internet. It would have been obvious for one of ordinary skill in the art to combine these ideas and implement a wireless or cellular modem, which are well known devices in computer communications.

8. Regarding claim 9, the further limitation of claim 1, see the preceding argument with respect to claim 1. Slezak teaches that the audio source is a network-based device (Col. 3, lines 55-61 and Col. 4, lines 43-47).

9. Regarding claims 10-12, see the preceding argument with respect to claim 1.

The combination of Slezak and McPherson teaches these features.

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10. Regarding claim 13, the further limitation of claim 12, see the preceding argument with respect to claim 2. The combination teaches a user control device.

11. Regarding claim 16, the further limitation of claim 13, see the preceding argument with respect to claim 5. The combination teaches a user control device with a button.

12. Regarding claim 18, the further limitation of claim 12, see the preceding argument with respect to claim 7. The combination teaches a wireless link.

13. Regarding claim 19, the further limitation of claim 18, see the preceding argument with respect to claim 8. The combination can obviously be modified to use a wireless modem in lieu of a modem using a landline.

14. Regarding claim 20, see the preceding argument with respect to claim 1. The combination teaches a computer as the primary user appliance, and therefore teaches this method on a computer readable medium.

15. Regarding new claim 21, the further limitation of claim 12, see the preceding argument with respect to claim 12. The combination of Slezak and McPherson teaches these features. McPherson teaches multiple channels played back on multiple transducers and teaches that the important data is encoded at higher bit-rates (Para. 0024 and 0028). Slezak teaches the different point sources can be selected as focus tracks.

16. Regarding new claim 22, the further limitation of claim 1, see the preceding argument with respect to claim 21. The combination teaches this feature.

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17. Regarding new claim 23, see the preceding argument with respect to claim 1.

The combination of Slezak and McPherson teaches these features.

18. Regarding new claim 24, the further limitation of claim 23, see the preceding argument with respect to claim 21. The combination teaches these features.

19. Claims 3, 4, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Slezak and McPherson as applied to claim 1 above, and further in view of the paper authored by Kobayashi et al., "Dynamic Soundscape: mapping time to space for Audio Browsing" (hereinafter Kobayashi).

20. Regarding claim 3, the further limitation of claim 2, see Kobayashi

*... wherein the user control device comprises a position sensor for being mounted on a body part of a user, the position sensor being arranged to cause selection of an audible sound or track as the focus sound or track by means of generating position data indicating the relative position of the user's body part, the playing device thereafter comparing the position data with the positional data for each of the audio components so as to determine the audible sound or track to which the user's body part is directed.*  
(p. 13, head interface paragraph)

The combination of Slezak and McPherson teaches the features of the parent claims, however they do not teach the use of head tracking or using a position sensor on a body part for user input. Kobayashi teaches an audio browser, and in one feature is the ability to track the users head movement for the purpose of bringing one of a plurality of sounds into focus within a three-dimensional soundscape. It would have been obvious for one of ordinary skill in the art to combine the teachings of Slezak, McPherson, and Kobayashi for the purpose of using a more natural user interface.

21. Regarding claim 4, the further limitation of claim 3, see the preceding argument with respect to claim 3. In the combination, Kobayashi teaches the use of a head-mountable sensor.

22. Regarding claim 14, the further limitation of claim 13, see the preceding argument with respect to claims 3 and 13. Kobayashi teaches the feature of head tracking to define user input.

23. Regarding claim 15, the further limitation of claim 14, see the preceding argument with respect to claim 14. Kobayashi teaches a head-mountable sensor.

24. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Slezak and McPherson as applied to claim 1 above, and further in view of Frulla et al., U.S. Pat. No. 6,424,357 (hereinafter Frulla).

25. Regarding claim 6, the further limitation of claim 2, see the preceding argument with respect to claim 2. Slezak and McPherson teach the features of claim 2, but they do not teach voice recognition. Frulla teaches a voice input system that interprets voice commands as those commands consistent with a user-controlled mouse (see abstract). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Slezak, McPherson, and Frulla for the purpose of hands free operation.

26. Regarding claim 17, the further limitation of claim 13, see the preceding argument with respect to claim 6. The combination of Slezak, McPherson, and Frulla teaches this feature.

***Response to Arguments***

27. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. See the rejections of claims 1-20 and the new claims 21-24 under 35 USC 103.

***Conclusion***

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dutkovich, U.S. Pat. No. 4,176,252 – Col. 12, lines 23-48, are directed towards individual control of audio tracks in a multi-track three dimensional audio space.

29. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DRS



**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**